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4 BEFORE THE HEARING BOARD
5 OF THE
6 BAY AREA AIR QUALITY MANAGEMENT DISTRICT
7 STATE OF CALIFORNIA

8 In the Matter of the Application of)
9 Delta Energy Center, LLC) No. 3426
10 For a Variance from Regulation 2,) ORDER GRANTING VARIANCE
11 Rule 1, Section 307)
_____)

12 The above-entitled matter is an Application for Variance from the provisions of Regulation
13 2, Rule 1, Section 307 filed on March 26, 2003.

14 Jeffrey Adkins, Esq., and Gary Rubenstein of Sierra Research appeared on behalf of Delta
15 Energy Center ("Applicant").

16 Toby Sherwood, Counsel, appeared for the Air Pollution Control Officer ("APCO").

17 The Clerk of the Hearing Board provided notice of this hearing on the Application for
18 Variance in accordance with the requirements of the California Health and Safety Code. The
19 Hearing Board heard the request for Variance on April 24, 2003. The Variance application
20 requested a Variance for the period April 28, 2003, through July 26, 2003.

21 The Hearing Board provided the public opportunity to testify at the hearing as required by
22 the California Health and Safety Code, but no one did so. The Hearing Board heard the
23 Applicant's and APCO's evidence and argument. The APCO did not oppose the granting of this
24 Variance.

25 The Hearing Board received evidence and argument, and took the matter under submission
26 for decision. After consideration of the evidence, the Hearing Board voted to grant the request for

1 Variance, as set forth in more detail below:

2 BACKGROUND

3 Applicant operates a gas turbine power plant located at 1200 Arcy Lane, Pittsburg,
4 California 94565. The company operates three Siemens Westinghouse 501FD gas turbines (S-1,
5 S-3 and S-5) with dry low-NOx combustors to produce electricity for sale to the electrical grid.
6 These combustors include certain components that must be replaced on a routine basis. Once new
7 combustor components have been installed, the turbines must be tuned at low operating loads to
8 meet manufacturer's specifications for emissions and combustion dynamics. Applicant discovered
9 during this tuning procedure at another similar facility that it could not operate within the
10 constraints of its permit limits. Applicant is now required to perform a combustor component
11 replacement and tuning procedure at this turbine site, and it has sought short-term Variance relief
12 for this procedure, pending approval of more permanent changes to the facility's permit to allow
13 for these activities in the future.

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15 DISCUSSION

16 Current permit conditions limit the Applicant to 180 minutes of operation in excess of its
17 NOx and CO emission concentration limits during turbine startup events and to a maximum of 240
18 pounds of NOx; 2,514 pounds of CO; and 48 pounds of POC emissions per turbine startup event.
19 Applicant is affiliated with Calpine Corporation, and Calpine has experienced problems meeting its
20 startup emission limits during combustor tuning procedures at other similar facilities, including the
21 Calpine Sutter Energy Center (Yuba City, California) and Calpine Los Medanos Energy Center
22 (Pittsburg, California). After its experience with these similar facilities, Applicant concluded that
23 proper tuning of its Pittsburg Delta Energy Center turbines could not be completed under its current
24 permit limits. Applicant submitted a permit application to the District on February 14, 2003, in an
25 effort to revise its permit conditions in time for its scheduled combustor tuning in late April 2003.
26 However, the permit has not yet been issued, and, as a result, Applicant submitted this request for

1 Variance relief. The District staff indicated that the requested changes to the permit are likely to be
2 made, thereby preventing the need for similar Variance requests in the future.

3 Applicant has requested a Variance from April 28, 2003, through July 26, 2003, or until
4 such time when the combustor tuning is complete or the revised permit application is issued,
5 whichever occurs first.

6 Applicant is not considered a small business as described by California Health and Safety
7 Code Section 42352.5(b)(1). Estimated maximum excess emissions during the startup and tuning
8 events are 2.4 pounds of NOx; 7,096 pounds of CO; and 32 pounds of POC per turbine for each of
9 the three turbines. The APCO has not requested Applicant to monitor or quantify actual emissions
10 beyond the continuous emissions monitoring for NOx and CO already required by the Permit to
11 Operate for these turbines.

12 13 SPECIFIC FINDINGS

14 The Hearing Board finds pursuant to Health and Safety Code Section 42352 that:

15 1. Applicant will be in violation of Regulation 2, Rule 1, Section 307 during the Variance
16 period. The regulation requires that the Applicant comply with its Permit Condition No. 17154
17 Item Nos. 22(a), (b), (c) (d), and (f) limiting NOx, CO, and POC emission rates during non-startup
18 operation, and Condition No. 17154, Item No. 23 limiting startup events to a maximum of 180
19 minutes and 240 pounds of NOx emissions, 2,514 pounds of CO emissions, and 48 pounds of POC
20 emissions.

21 2. Due to conditions beyond the reasonable control of the Applicant, requiring compliance
22 with District Regulation 2, Rule 1, Section 307, and Condition No. 17154, Item Nos. 22(a), (b),
23 (c), (d), (f), and 23 would result in an arbitrary and unreasonable taking of property. The new
24 combustor components require tuning, and it is beyond the reasonable control of the Applicant to
25 comply with these conditions. Compliance could be achieved only by shutdown, resulting in
26 Applicant's failure to meet contracts to deliver power. This would be an unreasonable taking of

1 property.

2 3. The hardship due to requiring immediate compliance with District Regulation 2,
3 Rule 1, Section 307 would be without a corresponding benefit in reducing air contaminants.
4 Applicant estimates that maximum excess emissions will be a total of 2.4 pounds of NO_x; 7,096
5 pounds of CO; and 32 pounds of POC from each of the three turbines during tuning activities.
6 Daily and annual emissions will remain within current permit limits.

7 4. Applicant considered curtailing operations in lieu of obtaining a Variance, but
8 curtailing operation would not result in compliance since tuning must be performed at low turbine
9 loads.

10 5. During the period the Variance is in effect, Applicant will reduce excess emissions
11 to the maximum extent feasible by meeting its daily and annual emission limits and conducting its
12 tuning activities at low loads and as quickly as possible.

13 6. The District staff has not requested Applicant to monitor or otherwise further
14 quantify any emission levels beyond what is already required by the Permit to Operate for these
15 turbines.

16
17 THEREFORE, THE HEARING BOARD ORDERS:

18 A Variance from Regulation 2, Rule 1, Section 307, Condition No. 17154, Item Nos. 22(a),
19 (b), (c), (d), (f) and 23 for Source Nos. S-1, S-3 and S-5 is hereby granted from April 28, 2003, to
20 and including July 26, 2003, or until such time as combustor tuning activities are completed or a
21 revised permit is issued by the District, whichever is sooner, subject to the following conditions:

- 22
23 1) The turbine tuning period shall not exceed 6 hours per turbine during the Variance
24 period.
25 2) Turbine emissions shall not exceed 300 pounds of NO_x; 9,750 pounds of CO; and
26 96 pounds of POC during the combustor tuning period after replacement of

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- combustor components for each tuning event.
- 3) There shall be no more than three turbine tuning events during the Variance period.
- 4) There shall be no more than one turbine tuning event per turbine.
- 5) Applicant shall pay the excess emission fees, pursuant to District Regulation No. 3, Schedule A.

Moved by: Christian Colline, P.E.

Seconded by: Allan R. Saxe, Esq.

AYES: Christian Colline, P.E., Julio Magalhães, Ph.D., Allan R. Saxe, Esq.,
Thomas M. Dailey, M.D.

NOES: None.

Absent: Terry A. Trumbull, Esq.

	5/14/03 Date
Thomas M. Dailey, M.D., Chair	